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NOTICE OF ALLOWANCE AND FEE(S) DUE

52054 7590 07/13/2011 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200

CLEVELAND, OH 44114-3108

CATTUNGAL, SANJAY

PAPER NUMBER

EXAMINER

ART UNIT

DATE MAILED: 07/13/2011

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/554,458 | 10/24/2005 | Masahiko Kadokura | NIHE-38852 | 9033 |

TITLE OF INVENTION: ULTRASONIC PROBE

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 10/13/2011 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

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| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) | | | | Fee(s | s) Transmittal. This rs. Each additional | certifi paper. | icate cannot be used for | domestic mailings of the r any other accompanying t or formal drawing, must |
| PEARNE & GO 1801 EAST 9TH SUITE 1200 CLEVELAND, O | /2011 | | I her State addre trans | Cert reby certify that this is Postal Service wi essed to the Mail mitted to the USPT | ificate s Fee(s ith suff Stop 1 O (57) | of Mailing or Transn) Transmittal is being ficient postage for first ISSUE FEE address a 1) 273-2885, on the dat | deposited with the United class mail in an envelope bove, or being facsimile e indicated below. | |
| | | | | | | | | (Depositor's name) |
| | | | | | | | | (Signature) |
| | | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVEN | TOR | | ATTO | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/554,458 | 10/24/2005 | | Masahiko Kadoku | ra | | | NIHE-38852 | 9033 |
| ITLE OF INVENTION | : ULTRASONIC PROB | E | | | | | | |
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| nonprovisional | NO | \$1510 | \$300 | | \$0 | \$0 | | 10/13/2011 |
| EXAM | INER | ART UNIT | CLASS-SUBCLASS | 3 | | | | |
| CATTUNGA | L, SANJAY | 3768 | 600-437000 | | | | | |
| Change of correspondence address or indication of "Fee Address" (37 FR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. | | | (1) the names of u or agents OR, alter (2) the name of a s registered attorney 2 registered patent | For printing on the patent front page, list 1) the names of up to 3 registered patent attorneys agents OR, alternatively, 2) the name of a single firm (having as a member a gistered attorney or agent) and the names of up to registered patent attorneys or agents. If no name is sted, no name will be printed. | | | | |
| PLEASE NOTE: Unl recordation as set forti (A) NAME OF ASSIG | less an assignee is ident h in 37 CFR 3.11. Comp GNEE | oletion of this form is NO | data will appear on the Tasubstitute for filing (B) RESIDENCE: (C) | he pa g an a | ntent. If an assigne assignment. and STATE OR Co | OUNT | RY) | cument has been filed for |
| lease check the appropri | iate assignee category or | categories (will not be pr | rinted on the patent): | | Individual 🖵 Coi | rporati | on or other private grou | p entity Government |
| a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies | | | 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). | | | | | |
| _ ~ . | tus (from status indicated s SMALL ENTITY statu | , | ☐ b. Applicant is no | long | er claiming SMAL | L ENT | TITY status. See 37 CF. | R 1.27(g)(2). |
| OTE: The Issue Fee an | d Publication Fee (if req | | d from anyone other th | | _ | | | assignee or other party in |
| • | | | | | | | | |
| Authorized Signature | | | | | Date | | | |
| Typed or printed name | | | | | • | | | |
| his collection of inform n application. Confident ubmitting the completed is form and/or suggestion ox 1450, Alexandria, V | ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this bur //riginia 22313-1450. DO | FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the NOT SEND FEES OR (| on is required to obtair 1.14. This collection i depending upon the e Chief Information O COMPLETED FORM | or re s esti indivi officer S TO | etain a benefit by th imated to take 12 m idual case. Any cor r, U.S. Patent and T o THIS ADDRESS. | e publ ninutes nments Tradem SENE | ic which is to file (and to complete, including s on the amount of tim lark Office, U.S. Depard TO: Commissioner for | by the USPTO to process) gathering, preparing, and e you require to complete tment of Commerce, P.O. or Patents, P.O. Box 1450, |

PTOL-85 (Rev. 02/11) Approved for use through 08/31/2013.

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| 10/554,458 | /554,458 10/24/2005 Masahiko Kadokura | | NIHE-38852 | 9033 | |
| 52054 75 | 90 07/13/2011 | EXAMINER | | | |
| PEARNE & GOI | | CATTUNGAL, SANJAY | | | |
| 1801 EAST 9TH S SUITE 1200 | TREET | | ART UNIT | PAPER NUMBER | |
| CLEVELAND, OF | I 44114-3108 | 3768 | | | |

DATE MAILED: 07/13/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 716 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 716 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

| | Application No. | Applicant(s) | | | | |
|--|---|--|--|--|--|--|
| | 10/554.458 | KADOKURA, MASAHIKO | | | | |
| Notice of Allowability | Examiner | Art Unit | | | | |
| | SANJAY CATTUNGAL | 3768 | | | | |
| | SANJAY CATTUNGAL | 3700 | | | | |
| The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in or other appropriate commu GHTS. This application is s | this application. If not included nication will be mailed in due course. THIS | | | | |
| 1. This communication is responsive to <u>1/24/11</u> . | | | | | | |
| 2. The allowed claim(s) is/are <u>1-7</u> . | | | | | | |
| 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: | | or (f). | | | | |
| Certified copies of the priority documents have Certified copies of the priority documents have | | n No | | | | |
| 3. ☐ Copies of the certified copies of the priority documents have | • • | | | | | |
| International Bureau (PCT Rule 17.2(a)). | cuments have been received | in this national stage application from the | | | | |
| * Certified copies not received: | | | | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | a reply complying with the requirements | | | | |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give | | | | | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mus | et be submitted. | | | | | |
| (a) including changes required by the Notice of Draftspers | on's Patent Drawing Review | (PTO-948) attached | | | | |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date | | | | | | |
| (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date | s Amendment / Comment or | in the Office action of | | | | |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t | | | | | | |
| 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT | | | | | | |
| | | | | | | |
| Attachment(s) | 5. Notice of Int | formal Patent Application | | | | |
| Notice of References Cited (PTO-892) Notice of Draftperson's Patent Drawing Review (PTO-948) | | • • | | | | |
| Paper No./Mail Date | | | | | | |
| Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 7. ☑ Examiner's Amendment/Comment | | | | | | |
| 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☑ Examiner's Statement of Reasons for Allowance of Biological Material | | | | | | |
| VOANUAN GATTUNGAN | 9. 🔲 Other | - | | | | |
| /SANJAY CATTUNGAL/ Primary Examiner, Art Unit 3768 | | | | | | |
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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael Garvey on June 12th 2011.

The application has been amended as follows:

Claim 1. Line 15 after "first pulley" inserted --and in a direction parallel to the longitudinal axis of the swinging shaft--

The following is an examiner's statement of reasons for allowance: the closest prior art of record are U. S. Patent No. 6,569,100 to Okawa et al. (figs. 1a, 2, and 5b; and col. 5 lines 55-60); U. S. Patent No. 6,840,938 to Morley et al. (abstract and fig. 4b); and U. S. Patent No. 5,938,551 to Warner (abstract, figs. 3, 9, and 12) none of the prior art alone or in combination teaches an ultrasonic probe comprising: a grip portion and insertion portion; a motor in the grip portion; a rotation shaft linked to rotation shaft of the motor and one end extended inside the tip portion of said insertion portion of the ultrasonic probe; a first pulley attached to the tip of the rotation shaft; a second pulley attached to a swinging shaft of the transducer, and a middle pulley between the first and second pulley; a wire laid between the first, second and third pulleys; and a sliding

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mechanism for supporting the middle such that the middle pulley is slidable in a direction toward and away from the first pulley and in a direction parallel to a longitudinal axis of the swinging shift to reduce looseness of the wire, and said middle pulley is not movable in a longitudinal direction of said longitudinal insertion portion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANJAY CATTUNGAL whose telephone number is (571)272-1306. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SANJAY CATTUNGAL/ Primary Examiner, Art Unit 3768